Accommodations Toolkit

Multiple Days: Research

This fact sheet on **testing over multiple days** is part of the *Accommodations Toolkit* published by the National Center on Educational Outcomes (NCEO). It summarizes information and research findings on the use of testing over multiple days as an assessment accessibility feature or accommodation for students with disabilities.[1] The toolkit also contains a summary of states' accessibility policies for testing over multiple days.

What is testing over multiple days? Testing over multiple days is a scheduling accommodation related to extended time (Walz et al., 2000). With this accommodation, an assessment may be broken into multiple parts to be completed on different, but typically consecutive, days. This scheduling variation could be implemented along with extended time (Fletcher, et al., 2009). Multiple day testing can create test security issues requiring extra security measures. During large scale tests, some states set strict conditions on, or prohibit the use of, testing over multiple days (Walz et al., 2000).

What are the research findings on who should use this accommodation? Students in the elementary grades who struggle with decoding benefited more from testing over multiple days than older students (Crawford et al., 2004; Fletcher et al., 2006, 2009).

What are the research findings on implementation of testing over multiple days? Five studies were located that addressed testing over multiple days. Three studies found that some students benefitted from using the testing over multiple days accommodation.

- Two studies examined whether testing over multiple days in combination with oral delivery improved student performance. These studies found that reading comprehension improved when this bundle of accommodations was provided, however, elementary students benefited more than older students (Fletcher et al., 2006, 2009).
- Two studies examined whether testing over multiple days in combination with an oral delivery accommodation reduced student fatigue (Fletcher et al., 2006, 2009). The studies addressed testing that occurred over two successive days of reading comprehension in grades 3 and 7. The studies found that that testing over multiple days reduced student fatigue and helped students with poor self-regulation to focus and keep pace with other students.
- One study (Fletcher, et al., 2009) found that students received similar benefits from using either an accommodation of testing with breaks during a single day or testing over two days.
- Two studies found that students pre-identified as "poor readers" performed significantly better when using in combination over multiple days and oral delivery, while average readers did not experience the same benefits (Fletcher et al., 2006, 2009).
- Crawford, Helwig, and Tindal (2004) examined whether testing over multiple days improved performance on writing assessments at grade 5 and grade 8. The grade 5 students benefited from the accommodation, however, there was no benefit for the grade 8 students.

Two studies found little benefit for some students from the use of the testing over multiple days accommodation.

- Two studies found little benefit for middle school students from the use of testing over multiple days on reading assessments (Crawford et al., 2004; Walz et al., 2000).
- One study found that testing over multiple days had little impact on scores for students with disabilities and a negative effect on scores for students without disabilities (Walz et al., 2000).

What perceptions do students and teachers have about testing over multiple days? Just one research study briefly discussed student or teacher perceptions about the use of the testing over multiple days accommodation. Marquart (2000) indicated that extended time, often scheduled across multiple days, was preferred by students and improved self-evaluation of their achievement.

What have we learned overall? There is a need for additional research on testing over multiple days. The limited research on testing over multiple days was all conducted more than a decade ago, which makes it difficult to draw conclusions about the advantages and disadvantages of this accommodation. However, testing over multiple days may benefit elementary students who struggle with reading. They are likely to experience fatigue while reading. The

benefits of testing over multiple days appears to diminish as students move into middle school. Testing over multiple days may be most effective when bundled with other accommodations including extended time and oral delivery of instructions. Test security needs to also be considered when this accommodation is used, since administration over multiple days may increase the potential for security breaches.

Footnotes

[1]

Research on testing over multiple days summarized here is also available in NCEO's searchable Accommodations for Students with Disabilities Bibliography (https://nceo.info/Resources/bibliographies) and in NCEO syntheses of research from 1999 through 2018 (see summaries for: 1999–2001 (https://nceo.umn.edu/docs/OnlinePubs/TechReport34.pdf), 2002–2004 (https://nceo.umn.edu/docs/OnlinePubs/Tech45/Technical45.pdf), 2005–2006 (https://nceo.umn.edu/docs/OnlinePubs/Tech47/TechReport47.pdf), 2007–2008 (https://nceo.umn.edu/docs/OnlinePubs/Tech56/TechnicalReport56.pdf), 2009–2010 (https://nceo.umn.edu/docs/OnlinePubs/Tech65/TechnicalReport65.pdf), 2011–2012 (https://nceo.umn.edu/docs/OnlinePubs/Synthesis94/Synthesis94.pdf), 2013–2014 (https://nceo.umn.edu/docs/OnlinePubs/Report402/NCEOReport402.pdf), 2015–2016 (https://nceo.umn.edu/docs/OnlinePubs/NCEOReport412.pdf), 2017 (https://nceo.umn.edu/docs/OnlinePubs/NCEOReport418.pdf), 2018 (https://nceo.umn.edu/docs/OnlinePubs/NCEOReport423.pdf), 2019 (https://nceo.umn.edu/docs/OnlinePubs/NCEOReport433.pdf). See the reports and online bibliography for additional information about the criteria used to identify studies included in this fact sheet.

References

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Walz, L., Albus, D., Thompson, S., & Thurlow, M. (2000). *Effect of a multiple day test accommodation on the performance of special education students*. Retrieved from University of Minnesota, National Center on Educational Outcomes website: http://www.cehd.umn.edu/NCEO/OnlinePubs/archive/AssessmentSeries/MnReport34.html

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